

### **AMENDMENTS TO THE DRAWINGS**

The attached sheet of Drawings includes changes to Fig. 4. The sheet containing the amended Fig. 4 replaces the original sheet containing Fig. 4. In Fig. 4, the membrane sound capture device 3 and the lead line therefor been drawn in broken lines. The depictions of vent holes 31 have been removed for clarity.

### **REMARKS/ARGUMENTS**

This case has been carefully reviewed and analyzed in view of the Official Action dated 19 April 2005. Responsive to the Examiner's rejections, Claim 1 has been amended and is now more clear in its recitation.

Fig. 4 has been amended to bring into agreement certain beneficial features of the present invention as described in the Specification with the illustrations thereof depicted in the Drawings. In the third paragraph of the "Detailed Description of Preferred Embodiments" (hereinafter the "Detailed Description"), it is described that a membrane sound capture device 3 is provided with "a plurality of vent holes 31 set inside the membrane sound capture device 3" (emphasis added). This disposition of the vent holes 31 is intended not only to allow "the vent holes [to] receive the vibration of the sound wave completely", but further establishes that when "the membrane sound capture device sticks tightly to a user's neck and there is no gap between them", the "interference caused by ambient sound is fully cut off", as is disclosed in the second paragraph of the Detailed Description. Thus, in order for the ambient noise to be completely cut off, the vent holes cannot be facing ambient sources of sound energy. However, when the vent holes are set inside the membrane sound capture device, i.e., facing inwardly towards a user when the membrane sound capture device is attached to the user through the sticking layer 32, the vent holes 31 are held in contact with the user's body and away from ambient noise sources.

The features of the invention previously described are clearly shown in Fig. 3. As is shown in the Figure, membrane sound capture device 3 has a “plurality of vent holes 31 set inside the membrane sound capture device 3” (emphasis added). Then, in accordance with the third paragraph of the Detailed Description, as amended by previous amendment, “the membrane sound capture device is stuck on a user’s neck near the user’s vocal cords (as shown in Fig. 4) by a sticking layer 32”. Unfortunately, Fig. 4 as originally submitted, did not show clearly that “the membrane sound capture device sticks tightly to a user’s neck and there is no gap between them”, so that “the interference caused by ambient sound is fully cut off”. Fig. 4, as originally submitted, apparently suggests that the vent holes 31 may be disposed *outside* the membrane sound capture device as opposed to “inside the membrane sound capture device 3”. Clearly, if the vent holes were formed on the outside of membrane sound capture device 3, the membrane sound capture device could not stick tightly to a user’s neck to where “the interference caused by ambient sound is fully cut off”. To the contrary, the invention of the subject Patent Application would be fully exposed to ambient noise.

Fig. 4 has been amended herewith to show that the membrane sound capture device is in contact with the user’s body through the use of sticking layer 32. So as to more clearly show the invention in a illustrative context, the membrane sound capture device 3, and the lead line from the numeric indicator “3” are now shown in broken lines. It should be understood that sticking layer 32

need not cover the entire backside of membrane sound capture device 3, as is suggested by the broken lines of amended Fig. 4, but is depicted in that manner to more clearly illustrate the inventive concepts.

The plurality of vent holes 31 are not shown in amended Fig. 4 in that it would be difficult to show such small features in broken line fashion. Attempts at doing so would once again introduce confusion, for example, by the vent holes appearing to be on the outside of membrane sound capture device 3.

It is believed that amended Fig. 4 now more clearly shows an exemplary application of the invention of the subject Patent Application by bringing into agreement the Specification and the Drawings. No new matter has been introduced by the changes.

In the Official Action, the Examiner rejected Claims 1, 2 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Yang (U.S. Patent No. 6,519,345) in view of Fig. 1 as admitted by the Applicant and further in view of Newman (U.S. Patent No. 2,678,973) or Hazard (U.S. Patent 2,611,829). In setting forth the rejections, the Examiner stated that the membrane sound capture device (2) of Yang has a plurality of vent holes (21, 81). The Examiner readily acknowledges that the combination of Yang in view of the Applicant's Fig. 1 does not show the sticking layer on the membrane sound capture device, and relied on Newman or Hazard for such disclosure.

As Applicant's amended Claims now more clearly recite, the invention of

the subject Patent Application has among its beneficial features a “membrane sound capture device having an inward face on which a plurality of vent holes is formed” and “a sticking layer disposed on the membrane sound capture device, the sticking layer operable to secure the inward face of the membrane sound capture device in contact with a user”. As described above, this configuration allows the membrane sound capture device to stick tightly to a user’s neck so that “the interference caused by ambient sound is fully cut off”.

These and other features are nowhere disclosed by the cited Yang reference. Yang shows a single vent hole 21, which by the location of an opening 81 in the slew cover 8 may be blocked or unblocked. When the vent hole 21 is unblocked, i.e., when opening 81 and vent hole 21 are aligned, there is a path for ambient sound to enter the microphone casing 2. This is clearly stated in column 2, lines 41-53 of the reference.

The configuration disclosed by Yang hardly permits, much less discloses, a “membrane sound capture device for receiving input of a sound wave, the membrane sound capture device having an inward face on which a plurality of vent holes is formed”, as Claim 1 now more clearly recites. It is certainly apparent from Yang that the vent hole configuration thereof is intended to receive sound waves from the user’s mouth. As such, the microphone of Yang is fully exposed to other sources of sound in the proximity of the microphone. Moreover, the very nature of the invention of Yang is to provide selectivity between a vibrational

receiving mode, where vibration of vocal cords is sensed, and a direct sound-receiver mode for receiving sound waves transmitted from a user through the air. Since the vibrational mode transducer must be in contact with the throat structure of the user, as shown in Fig. 6 of the reference, Yang's microphone has the direct sound-receiver vent hole located on a lateral portion of the microphone casing. The necessary placement of the vibration sensing mechanism of Yang precludes "the membrane sound capture device having an inward face on which a plurality of vent holes is formed", as Claim 1 now recites. Thus, not only does Yang fail to disclose Applicant's claimed structure, the reference teaches actively against it.

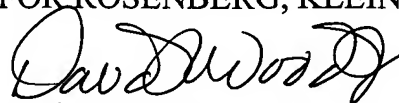
Given such contrary teachings of the primarily-cited Yang reference, the teachings of the secondarily-cited Newman and Hazard references are found to be quite ineffectual to the present patentability analysis. Admittedly, both Newman and Hazard illustrate the use of an adhesive component for fixing a transducer to the skin of a user; both references are directed to securing a vibrational mechanism in proximity to bones adjacent to the inner ear for purposes of transmitting sound thereto. As such, they do not disclose, or even suggest, a "membrane sound capture device having an inward face on which a plurality of vent holes is formed" and a "sticking layer operable to secure the inner face of the membrane sound capture device in contact with the user". The Newman and Hazard references were cited by the Examiner for disclosing the structural details of the adhesive layer, but the references are not sufficient to remedy the deficiencies of Yang's

teachings.

All of the pending Claims of the subject Patent Application, as now amended, either by direct recitation or by inherency from its dependency on a base claim, include the limitations of a “membrane sound capture device having an inward face on which a plurality of vent holes is formed” and a “sticking layer operable to secure the inward face of the membrane sound capture device in contact with a user”. None of the prior art references cited by the Examiner disclose these and other features in combination as recited in the currently amended Claims.

It is respectfully submitted, therefore, that the cited Yang, Newman and Hazard references, even when considered together, fail to disclose the unique combination of elements now more clearly recited by Applicant's pending Claims for the purposes and objectives disclosed in the subject Patent Application. As such, it is believed that the subject Patent Application is in condition for allowance and such action is respectfully requested.

Respectfully submitted,  
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